

apparent from the following detailed description of the invention, as illustrated in the accompanying drawings, in which:

FIG. 1 is a block diagram of a circuit to correct a DVRT for time and spatial variations in temperature;

5        FIGS. 2a is cross sectional view of a DVRT in the null position;

FIGS. 2b is cross sectional view of the DVRT of FIG. 2a in the fully displaced position;

FIG. 3 is a block diagram showing measurement of resistance of one coil of a DVRT to correct a DVRT for time and spatial variations in temperature;

10        *PS 8/21/64*        ~~FIG. 3 is a photograph of a packaged sensor of the present invention;~~

FIG. 4a is a cross sectional view of a single coil DVRT in the null position;

FIGS. 4b is cross sectional view of the DVRT of FIG. 4a in the fully displaced position;

15        FIG. 5 is a flow chart showing the algorithm of FIG. 1 to compensate for change in temperature in the permeable member; and

FIG. 6 is a graph of test data comparing a device of the present invention to a device without the circuit element for compensating for temperature changes in the highly permeable member.